

IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with strikethrough. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please AMEND the claims according to the following:

1. (CURRENTLY AMENDED) A partial reprojection method for use in a three-dimensional CAD system, the method comprising:

generating a two-dimensional projection of a three-dimensional assembly model formed of a plurality of parts by projecting the three-dimensional assembly model formed of the plurality of parts, the two-dimensional projection having part information based on a coordinate system of the three-dimensional assembly model for each of the plurality of parts;

grouping two-dimensional elements together in the two-dimensional projection for each of the plurality of parts to form a part group for each of the plurality of parts;

adding the part information to the part group when said grouping is performed for each of the plurality of parts, the part information including a part name, a part line of sight of a part which is obtained by converting an original line of sight held in the three-dimensional assembly model based on the coordinate system of the three-dimensional assembly model into the line of sight of the part based on coordinates system of the part, and a part position for each of the plurality of parts based on the coordinate system of the three-dimensional assembly model;

leaving the three-dimensional assembly model unloaded and loading, as a target for a partial reprojection, only a modified three-dimensional part model of a part of which a shape has been modified among the plurality of parts;

deciding a projecting-direction-line of sight for performing partial reprojection applicable to the modified three-dimensional part model thus loaded based on the part line of sight included in the part information of the part whose modified three-dimensional part model is to be subjected to the partial reprojection;

deciding, in the two-dimensional projection of the assembly model, a generating position in which two-dimensional elements of the modified three-dimensional part model are to be

generated based on the part position that is based on the coordinate system of the three-dimensional assembly model and included in the part information of the part whose modified three-dimensional part model is to be subjected to the partial reprojection; and

performing, based on the projecting direction-line of sight for performing partial reprojection and the generating position thus decided, the partial reprojection of the modified three-dimensional part model, and generating a modified version of the two-dimensional projection of the assembly model by reflecting the shape that has been changed.

2. (Previously Presented) The partial reprojection method according to claim 1, further comprising:

deciding which should be performed, an entire reprojection based on the assembly model or the partial reprojection based on the modified three-dimensional part model, wherein:

if the partial reprojection is decided to be performed, only the shape that has been changed is reflected in the modified version, and the part information is unchanged.

3-5. (CANCELLED)

6. (CURRENTLY AMENDED) A computer-readable medium storing a program for a three-dimensional CAD system, the program causing a computer to perform:

generating a two-dimensional projection of a three-dimensional assembly model formed of a plurality of parts by projecting the three-dimensional assembly model formed of the plurality of parts, the two-dimensional projection having part information based on a coordinate system of the three-dimensional assembly model for [[each]] each of the plurality of parts;

grouping two-dimensional elements together in the two-dimensional projection for each of the plurality of parts to form a part group for each of the plurality of parts;

adding the part information to the part group when said grouping is performed for each of the plurality of parts, the part information including a part name, a part line of sight of a part which is obtained by converting an original line of sight held in the three-dimensional assembly model based on the coordinate system of the three-dimensional assembly model based on coordinates system of the part, and a part position for each of the plurality of parts based on the coordinate system of the three-dimensional assembly model;

leaving the three-dimensional assembly model unloaded and loading, as a target for a partial reprojection, only a modified three-dimensional part model of a part of which a shape has

been modified among the plurality of parts;

deciding a projecting-direction line of sight for performing partial reprojection applicable to the modified three-dimensional part model thus loaded based on the part line of sight included in the part information of the part whose modified three-dimensional part model is to be subjected to the partial reprojection;

deciding, in the two-dimensional projection of the assembly model, a generating position in which two-dimensional elements of the modified three-dimensional part model are to be generated based on the part position that is based on the coordinate system of the three-dimensional assembly model and included in the part information of the part whose modified three-dimensional part model is to be subjected to the partial reprojection; and

performing, based on the projecting-direction line of sight for performing partial reprojection and the generating position thus decided, the partial reprojection of the modified three-dimensional part model, and generating a modified version of the two-dimensional projection of the assembly model by reflecting the shape that has been changed.

7. (currently amended) The computer-readable medium according to claim 6, the program causing the computer to further perform:

deciding which should be performed, an entire reprojection based on the assembly model or the partial reprojection based on the modified three-dimensional part model; wherein:

if the partial reprojection is decided to be performed, only the shape that has been changed is reflected in the modified version, and the part information a is unchangedunchanged.

8-9. (Cancelled)